

EMN Series Manual Line Starters and Enclosures

600VAC Maximum

Cl. I, Div. 1 & 2, Groups C, D
 Cl. II, Div. 1, Groups E, F, G
 Cl. II, Div. 2, Groups F, G
 Cl. III
 NEMA 3, 7CD, 9EFG, 12

Explosionproof
 Dust-Ignitionproof
 Raintight
 Wet Locations

2C

Applications:

EMN manual line starters and enclosures are used:

- For manual across-the-line starting of single and polyphase AC motors
- To provide motor running protection and manual starting and stopping
- In locations made hazardous due to the presence of flammable vapors, gases, or high combustible dusts
- For installation in petroleum refineries, chemical and petrochemical plants, and other process industry facilities
- In damp, wet, or corrosive locations

Features:

- Compact, rectangular enclosure makes optimum use of internal space
- Operating handle may be padlocked in either "ON" or "OFF" position
- Compact design allows installation in area where space is limited
- Furnished with drilled and tapped conduit openings
- Polyphase manual starters are furnished with third overload relay as standard

Certifications and Compliances:

- NEC/CEC
 - Class I, Division 1 & 2, Groups C, D
 - Class II, Division 1, Groups E, F, G
 - Class II, Division 2, Groups F, G
 - Class III
- NEMA/VEEMAC: 3, 7CD, 9EFG, 12
- UL Standard: 1203
- CSA Standard: C22.2 No. 14

Standard Materials:

- Bodies, covers and toggle operator – copper-free aluminum
- Operating shaft – stainless steel
- Internal operating bail – sheet steel or aluminum

Standard Finishes:

- Copper-free aluminum – natural
- Stainless steel – natural
- Sheet steel – electrogalvanized with chromate finish

Electrical Rating Ranges:

- Starter sizes 0, 1, 1P

Options:

The following special options are available from factory by adding suffix to Cat. #:

| Description | Suffix |
|---|--------|
| Standard Breather (Cl. I, Groups C, D; Cl. II, Groups E, F, G; Cl. III) | S219 |
| Standard Drain (Cl. I, Groups C, D; Cl. II, Groups E, F, G; Cl. III) | S198 |
| Standard Breather and Drain (Cl. I, Groups C, D; Cl. II, Groups E, F, G; Cl. III) | S198V |
| Universal Breather-Drain (Cl. I, Groups C, D; Cl. II, Groups F, G) | S454 |
| (2) Universal Breather-Drains (Cl. I, Groups C, D; Cl. II, Groups F, G) | S454V |

Ordering Information:

Specify HP, voltage, frequency, number of phases, RPM, type and full load ampere rating of motor – or specify ampere rating of heaters.

Two pole starters require one heater; three pole starters have three heaters.



2C

Motor Starter

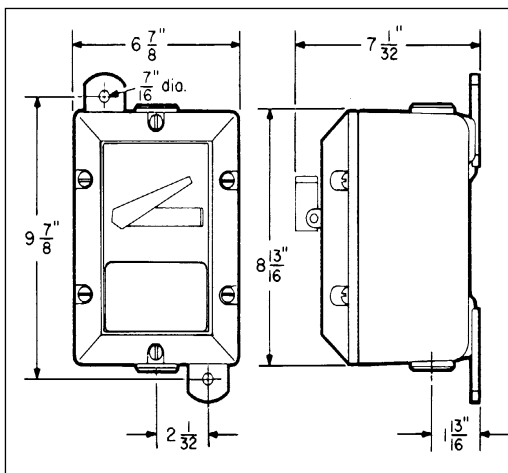
| NEMA Size | Poles (Phase) | Max. AC HP Ratings | | | Enclosure With Starter Cat. # |
|-----------|---------------|--------------------|----------|----------|-------------------------------|
| | | 115V | 208/240V | 480/600V | |
| M-0 | 2 (1PH) | 1 | 2 | | EMN24 W20 |
| M-1 | 2 (1PH) | 2 | 3 | | EMN24 W21 |
| M-1P | 2 (1PH) | 3 | 5 | | EMN24 W21P |
| M-0 | 3 (3PH) | 2 | 3 | 5 | EMN24 W30 |
| M-1 | 3 (1PH) | 2 | 3 | | |
| M-1 | 3 (3PH) | 3 | 7½ | 10 | EMN24 W31 |

Enclosure Without Starter

| Starter Manufacturer | Enclosure Cat. #† |
|----------------------|-------------------|
| Cutler-Hammer | EMN24 |

Dimensions*

In Inches:



†Enclosures are furnished with two 1¼" drilled and tapped openings with 1¼" to 1" reducers.
 *Dimensions are approximate, not for construction purposes.